ET HIDIT D

Lab Experiment 4

On February 11, 2000, Steve Furnas, Dave Palmer, and Toby McMurty of CLS Labs and Joe Erway of SIPI met with Mike Williams President of Digital Doc Inc. at his offices in Folsom, California.

The purpose of the meeting was to evaluate the technology Digital Doc manufactures to produce magnified images, that will transfer to a computer or VCR or a television monitor. Using his existing product that is currently used in the dental industry, we attempted to identify mold on a prepared slide. The lenses in the on the shelf model provided insufficient magnification to identify the mold. We then went into R&D section of the facility and a lens configuration equaling a magnification of 10x was installed in the device. Steve Furnas was able to state that the organisms being observed were mold, but the magnification was not strong enough to indicate genus or species. Mike stated that he could provide a set of removable lenses with 10x, 400x and 1000x that would view at a 45 degree and a zero degree angle with the various lenses. Due to the fact that the 10x view of the slides provided such good definition, we are confident that we can both identify and enumerate molds, yeast's, mildews, smuts, pollen, or anything else that might require microscopy. The system we are proposing to have Digital Doc make for us will replace the traditional microscope as well as a traditional camera. We also discussed making a number of appliances that we could attach to the device that would make it user friendly including mounting the device on a set of rollers, or on a cable with a universal joint, a moving stage like a microscope, so that we could in fact replace traditional microscopes with the technology. Joe Erway suggested that for examining Zefon air samples that we construct a special holder to place the slide into that will have a preetched grid for purposes of establishing the counting fields, and enumerating the mold spore's.